WHAT IS CLAIMED IS:

1. (Currently Amended) A method for manufacturing optical fiber with enhanced photosensitivity comprising the steps of:

forming a molten layer of glass; [[and]]

drawing a fiber from said molten layer of glass at a temperature of between about 1975 [[1900°C]] and 1995°C; and

writing a grating on said optical fiber by exposing said fiber to ultraviolet radiation.

2. (Cancelled)

3. (Original) The method for manufacturing optical fiber with enhanced photosensitivity according to claim 2, wherein said drawing step further comprises drawing said fiber at a tension between 100 gm and 250 gm.

4. (Original) The method for manufacturing optical fiber with enhanced photosensitivity according to claim 2, wherein said molten layer is manufactured in accordance with a chemical vapor deposition process.

5. (Original) The method for manufacturing optical fiber with enhanced photosensitivity according to claim 4, wherein said forming step comprises forming glass layers corresponding to a core and a cladding.

6. (Original) The method for manufacturing optical fiber with enhanced photosensitivity according to claim 2, wherein said molten layer is manufactured in accordance with a modified chemical vapor deposition process.

7. (Original) The method for manufacturing optical fiber with enhanced photosensitivity according to claim 2, further comprising the step of doping said optical fiber along a core portion.

8. (Original) The method for manufacturing optical fiber with enhanced photosensitivity according to claim 7, wherein said doping step comprises doping the core portion with germanium.

9. (Original) The method of manufacturing optical fibers with enhanced photosensitivity according to claim 7, wherein said doping step comprises doping the core portion with boron.

10. (Original) The method for manufacturing optical fiber with enhanced photosensitivity according to claim 3, wherein said draw tension remains constant throughout said drawing step.

11. (Original) The method for manufacturing optical fiber with enhanced photosensitivity according to claim 2, wherein said drawing step comprises drawing said optical fiber at a temperature between about 1980°C and 1990°C.

12. (Cancelled)

13. (Currently amended) The method for manufacturing optical fiber with enhanced photosensitivity according to claim[[11]] 1, wherein said ultra violet radiation is between about 193 and 248 nm in wavelength inclusive.

14. An improved method for manufacturing optical fiber with enhanced photosensitivity [[of the type]] wherein said fiber is drawn from a molten layer of glass at a [[predetermined]] temperature and a [[predetermined]] tension of less than 100 gm [[and at a predetermined rate]], wherein the improvement comprises the steps of:

lowering said temperature that said fiber is driven [[at]] to between about 1900°C and 1995°C [[2% and 3%]] while increasing said preselected draw tension to between about 100 gm and 250 gm, and writing a grating on said optical fiber by exposing said fiber to ultraviolet radiation.

15. (Cancelled)

16. (Currently Amended) The improved method for manufacturing optical fiber with enhanced photosensitivity according to claim 14, wherein said temperature is lowered to between about 1975°C and 1995°C in said temperature lowering step.

17. (Cancelled)

18. (Original) The improved method for manufacturing optical fiber with enhanced photosensitivity according to claim 14, wherein said molten layer of glass is manufactured in accordance with a modified chemical vapor deposition process.

19. (Currently Amended) A method for manufacturing optical fiber with enhanced photosensitivity comprising the steps of:

drawing said fiber from a molten layer of glass at a temperature of about 1985°C and a tension of about 200 gm; and

writing a grating on said optical fiber by exposing said fiber to ultraviolet radiation.

20. (Original) The method for manufacturing optical fiber with enhanced photosensitivity according to claim 19, wherein said molten layer is manufactured in accordance with a chemical vapor deposition process.

21. (Original) The method for manufacturing optical fiber with enhanced photosensitivity according to claim 19, wherein said molten layer is manufactured in accordance with a modified chemical vapor deposition process.

22. (Original) The method for manufacturing optical fiber with enhanced photosensitivity according to claim 19, further comprising the step of doping said optical fiber along a core portion.

23. (Original) The method for manufacturing optical fiber with enhanced photosensitivity according to claim 22, wherein said step of doping comprises doping said core portions with germanium.

24. (Original) The method of manufacturing optical fiber with enhanced photosensitivity according to claim 22, wherein said doping step comprises doping the core portion with boron.

25. (Cancelled)

26. (Currently Amended) The method for manufacturing optical fiber with enhanced photosensitivity according to claim [[24]] 19, wherein said ultraviolet radiation is between about 193 and 248 nm in wavelength inclusive.

27. (New) A method for manufacturing optical fiber with enhanced photosensitivity comprising the steps of:

drawing said fiber from a molten layer of glass at a temperature of between about 1900°C and 1995°C; and

writing a grating on said optical fiber by exposing said fiber to ultraviolet radiation.

28. (New) A method for manufacturing optical fiber with enhanced photosensitivity comprising the steps of:

drawing said fiber from a molten layer of glass at a temperature of between about 1900°C and 1995°C and

doping said optical fiber along a core portion.

29. (New) A method for manufacturing optical fiber with enhanced photosensitivity comprising the steps of:

forming a layer of molten glass;

drawing a fiber from said molten layer of glass at a temperature of under 2025°C and tension of between about 100 gm and 250 gm, and

writing a grating on said optical fiber by exposing said fiber to ultraviolet radiation.

30. (New) A method for manufacturing optical fiber with enhanced photosensitivity comprising the steps of:

forming a layer of molten glass;

drawing a fiber from said molten layer of glass at a temperature of under 2025°C and at a tension of between about 100 gm and 250 gm; and

doping said optical fiber along a core portion.